

REMARKS

The Applicant is filing this Amendment and Response in response to an Official Action dated August 15, 2006, which was supplemental to an Official Action dated August 1, 2006. At the time of the Official Action, claims 18 and 26-47 were pending. In this Response and Amendment, claims 18, 26 and 37 are amended, no claims are canceled or added. Accordingly, claims 18 and 26-47 remain currently pending.

Claim Rejection under Doctrine of Obviousness-Type Double Patenting

The Examiner rejected claims 18 and 26-47 under the judicially created doctrine of obviousness-type double patenting over claims 1-4 of U.S. Patent No. 6,308,167 ("the '167 patent"), which is the parent of the present continuing application, and other secondary references. Although Applicant does not concede that the present claims 18 and 26-47 are obvious over claims 1-4 of the parent application in view of the secondary references, the Applicant is filing herewith a terminal disclaimer to overcome the rejection of all pending claims under the judicially created doctrine of obviousness-type double patenting based on the '167 patent.

The Rejection Under 35 U.S.C § 101

The Examiner rejected independent claims 18, and 27-47 under 35 U.S.C. §101 because they disclose a claimed invention that is not limited to a practical application and that the invention is an abstract idea as defined in *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed.Cir. 1994). The Examiner noted that computing steps recited in the claims do not produce any tangible results because the claims do not recite hardware, i.e., a computer, on which software runs to perform the steps recited by the claims. *See*, Office Action, page 12.

The Applicant does not concede to the assertions made by the Examiner because adding a limitation to the claims, such as “a computer,” is immaterial to whether the claimed subject matter is statutory under Section 101. However, to advance prosecution of the present application, the Applicant has amended the claims to include such a limitation to all of the independent claims.

The Rejection Under 35 U.S.C. § 102(b)

In the Office Action, claims 18, 26-28, 30-32, 35-39, 41-43, 46, and 47 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,410,722 to Cornaby (hereinafter, “the Cornaby reference”).

With respect to the rejection of independent claims 18, 26 and 37 under Section 102 based on the Cornaby reference, the Examiner stated:

As per claim 18, Cornaby teaches the limitation:

“A method for managing a queue having a plurality of queue headers within a computer system comprising the steps of:”(Figure 2-3L)

“attaching a plurality of data structures to the plurality of queue headers, where each data structure is attached to one of the plurality of queue headers” (Figure 2-3L) *which shows a plurality of queue headers wherein each queue header includes a data structure*); and

“controlling operations of the plurality of queue headers utilizing one of a plurality of queue function calls” (Figure 2-3L).

As per claim 26, Cornaby discloses the limitations:

“A computer system that employs a queuing system, the queuing system” (Figure 2-3L) comprising:

“a plurality of generic queue headers, the plurality of generic queue headers being connected by a plurality of links”

(Figure 2, which shows a plurality of queues, Abstract, and Column 1, Lines 54-64); and

“a data structure attached to at least one of the plurality of generic queue headers without reference to the plurality of links” (Figure 3A-3L).

Claim 37 is rejected on the same basis as claim 26.

Office Action, pp. 13-15.

Legal Precedent

The Applicant respectfully traverses the rejection. Anticipation under section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). In order to maintain a proper rejection under section 102, a single reference must teach each and every element or step of the rejected claim, else the reference falls under section 103. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Accordingly, the Applicants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter. The prior art reference also must show the *identical* invention “in as complete detail as contained in the ... claim” to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989).

Features of independent claims 18, 26 and 37 omitted from the Cornaby Reference

In the present case, the Cornaby reference does not anticipate the Applicant's claims under Section 102 because every element of the claimed invention is not identically shown in

the Cornaby reference. Specifically, independent claim 18 recites “[a] method for managing a queue having a plurality of queue headers.” Further, the method comprises the acts of “attaching a plurality of data structures to the plurality of queue headers” and “controlling operations of the plurality of queue headers utilizing one of a plurality of queue function calls, wherein the functions calls are *configured to search the data structures*. (Emphasis added). Similarly, independent claims 26 and 37 recite a system and method, respectively, such that the “plurality of queue headers are controlled by a plurality of function calls configured to *search the data structures*.” (Emphasis added).

In contrast to the Applicant’s claims, the Cornaby reference discloses a queue system for generating a plurality of queues that are formed from dedicated memory registers, but lacks any disclosure of data structures, such as those recited by the claims, searchable by the queues and function calls and/or task registers. As set forth by the Cornaby reference:

Briefly, this invention is directed to the formation of a plurality of queues from a dedicated set of memory registers within a random access memory unit. The memory registers are either header registers or task registers. Each queue has a specified header register and those task registers assigned to that queue. A task register is always assigned to a queue within the queue system. All registers contains at least two fields, a previous field and a next field. For any register used within the queue system, the previous field will contain the address of the preceding register in that queue and the next field containing the address of the following register in the queue. One queue is designated as an empty queue which will contain those task registers which are not presently being used in one of the active queues in the queue system. Task registers are effectively moved between queues by changing the contents of the next and previous fields of the register to be moved and the next and previous fields of the other registers in the queue which will be affected by the insertion or removal of the task register to be inserted or removed from the queue. The task registers are not physically moved between queues but are effectively moved by controlling the previous and next fields of the register, thereby allowing the formation of pseudo queues within the queue system where the length of each pseudo queue is defined by the

number of task registers linked to the header register for that queue at any given instant of time. A control means is provided for performing procedures for inserting and removing task register from queues.

Cornaby, col. 2, lines 19-49.

Hence, the Cornaby reference describes a scheme for assigning a task register to a queue within a queue system, as well as, a scheme for managing and moving task registers using fields associated therewith which contain addresses of next and previous task registers. Stated otherwise, the system disclosed by the Cornaby reference purely deals with manipulating task registers assigned to queue headers to transfer tasks from one queue to another. *See*, Cornaby, col. 2, lines 61-63. However, the Cornaby reference does not disclose how such a system would be used, for example, to perform searches of data structures, such as those mentioned in the claims.

Further, as stated above, the Examiner has interpreted data associated with queue header and task register data as disclosed by the Cornaby reference to be the data structures recited by independent claims 18, 26 and 37. *See*, Cornaby, Figs, 3A-3L. However, Applicant submits that data taught by the Cornaby reference is clearly not the same as the data structures recited by the claims, because the latter are not part of the task register. Consequently, the system taught by the Cornaby reference is not configured to search these data structures and, even it were, it would still not anticipate the present claims since the data structures recited by the claims are simply not the data structures cited by the Examiner in the Cornaby reference.

For at least these reasons, the Cornaby reference does not and cannot anticipate independent claims 18, 26 and 37, as well as those claims depending therefrom. Accordingly, Applicant requests the Examiner to withdraw the rejection and allow independent claims 18, 23 and 37.

Cornaby does not anticipate dependent claims 28 and 39

Aside from being dependent on an allowable base claim, the rejection of dependent claims 28 and 39 is improper because the prior art reference that is used to reject the claims does not disclose each and every element recited by claims 28 and 39. Particularly, dependent claims 28 and 39 recite a plurality of function calls that include “an insert call, a remove call, a search and remove call, a search and insert call, a search only call and a peek call.” Applicant submits that the above recited elements are not disclosed in the Cornaby reference. The portions of text which the Examiner cited in rejecting claims 28 and 39 summarize the scheme for managing queue headers and task registers, but lack disclosure of the foregoing claim limitations. Accordingly, the Applicant requests the Examiner to specifically point out where such limitations are disclosed in the Cornaby reference. Absent any such disclosures, the rejections of dependent claims 28 and 39 cannot stand.

The Rejection Under 35 U.S.C. § 103

In the Office Action, claims 29 and 40 were rejected under 35 U.S.C. § 103(a) as being rendered obvious by Cornaby in view of Douceur et al., Patent No. 6,041,053, and, claims 35 and 46 were rejected under 35 U.S.C. § 103(a) as being rendered obvious by Cornaby in view of Peterson et al., Patent Publication No. 2006/0010420. Further, claims 36 and 47 were rejected under 35 U.S.C. § 103(a) as being rendered obvious by Cornaby in view of Fischer et al., Patent Publication No. 2002/0163932. Similarly, claims 33, 34, 44, and 45

were rejected under 35 U.S.C. § 103(a) as being rendered obvious by Cornaby in view of Johnson et al., Patent No. 5,133,053, and claims 35 and 46 were rejected under 35 U.S.C. § 103(a) as being rendered obvious by Cornaby in view of Peterson et al., Patent Publication No. 2006/0010420.

Legal Precedent

The Applicant respectfully traverses the rejection. The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988).

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221

U.S.P.Q. 929, 933 (Fed. Cir. 1984). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

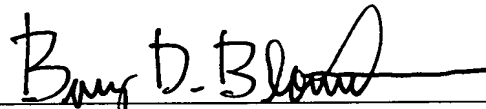
The Examiner rejected claims 29, 33, 34, 35-36, 40, 44-45 and 47, each depending from allowable base claims 26 and 37, under 35 U.S.C. § 103(a) as obvious over the Cornaby reference in view of the above mentioned multiple secondary references. Applicant respectfully traverses these rejections. Applicant respectfully submits that claims 29, 33, 34, 35-36, 40, 44-45 and 47 are allowable based on their dependencies on independent claims 26 and 37, because the other secondary references do not cure the deficiencies described above in regard to the Cornaby reference. For at least these reasons, Applicant respectfully asserts that the Examiner has clearly not established a prima facie case of obviousness with regard to claims 29, 33, 34, 35-36, 40, 44-45 and 47. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejections under Section 103 and allow claims 29, 33, 34, 35-36, 40, 44-45 and 47.

Conclusion

In view of the remarks set forth above, the Applicant respectfully requests reconsideration of the Examiner's rejections and allowance of all pending claims 18 and 26-47. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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